

What is claimed is:

1. A W-CDMA transmission rate estimation method
2 comprising selecting a maximum likelihood transport
3 format combination of a plurality of transport format
4 combinations representing bit length combinations
5 constituting a plurality of transport channels, each
6 having a variable bit length, on the basis of
7 correlation strengths between a normal encoded bit
8 string and bit strings of data obtained by performing
9 Viterbi decoding processing for data, of a reception
10 output constituted by the respective transport channels,
11 which corresponds to an arbitrary transport channel, and
12 estimating a data transmission rate on the basis of the
13 selected combination.

2. A method according to claim 1, further
2 comprising using a plurality of path metric values
3 calculated in the Viterbi decoding processing as values
4 indicating the correlation strengths.

3. A method according to claim 2, further
2 comprising storing, for each of the transport format
3 combinations, a maximum path metric value obtained by
4 using the transport format combination, and selecting a
5 maximum likelihood transport format combination by
6 comparing the stored maximum path metric values for the

7 respective stored transport format combinations.

4. A method according to claim 2, further
2 comprising concurrently calculating maximum path metric
3 values, for the respective transport channels, which are
4 obtained by concurrently performing the Viterbi decoding
5 processing for the respective transport channels when
6 the respective transport format combinations are used,
7 statistically processing the respective path metric
8 values obtained for the respective transport channels in
9 units of transport format combinations, and selecting a
10 maximum likelihood transport format combination on the
11 basis of the statistical processing result.

5. A W-CDMA transmission rate estimation device
2 comprising transmission rate estimating means for
3 performing Viterbi decoding processing for data, of a
4 reception output constituted by a plurality of transport
5 channels each having a variable bit length, which
6 corresponds to an arbitrary transport channel, and
7 selecting a maximum likelihood transport format
8 combination of a plurality of transport format
9 combinations representing bit length combinations
10 constituting the respective transport channels, thereby
11 estimating a data transmission rate.

6. A W-CDMA transmission rate estimation device

2 for estimating a data transmission rate by performing
3 Viterbi decoding processing for data, of a reception
4 output constituted by a plurality of transport channels
5 each having a variable bit length, which corresponds to
6 an arbitrary transport channel, comprising:
7 maximum path metric comparing means for
8 comparing a plurality of path metric values obtained for
9 the respective transport format combinations when the
10 transport format combinations are used in the Viterbi
11 decoding processing, thereby selecting a maximum path
12 metric value;
13 maximum path metric storage means for storing
14 the maximum path metric value selected by said maximum
15 path metric comparing means; and
16 estimating means for comparing the maximum
17 path metric values for the respective transport format
18 combinations stored in said maximum path metric storage
19 means, and selecting a maximum likelihood transport
20 format combination, thereby estimating a data
21 transmission rate.

7. A device according to claim 6, wherein
2 said maximum path metric comparing means and
3 said maximum path metric storage means are provided in
4 parallel for the respective transport channels,
5 said device further comprises statistical
6 processing means for statistically processing the

7 maximum path metrics stored in said respective maximum
8 path metric storage means for the respective transport
9 format combinations, and
10 said estimating means compares the statistical
11 processing results obtained by said statistical
12 processing means for the respective transport format
13 combinations, and selects a maximum likelihood transport
14 format combination, thereby estimating a data
15 transmission rate.

0340823 042504